BRUHATH BANGALORE MAHANAGARA PALIKE

Yelahanka Zone, Kodigehalli Sub Division

14

Name of the work: **Construction of drain at Balaji layout in ward no. 08, kodigehalli**

			Estimate Cost: Rs.					3000000.00	
Sl. No	Description	Unit	No.	L	B	D	Qty	Rate	Amount
1	Dismantling of existing structures like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T & P and scaffolding wherever necessary, sorting the dismantled material, disposal of unserviceable material and stacking the serviceable material with all lifts complete as per specifications. - reinforced cement concrete grade M20 and above (PWDSR 2018-19, P.139, I. 18.19)								
	Culverts								
	5th main 1st cross Balaji layout	cum	1	4.00	1.50	0.20	1.20		
	On cross roads of Balaji layout	cum	1	4.80	1.50	0.20	1.44		
	CC parapet wall						0.00		
	cc road adjacent mosque	cum	1	8.00	0.35	1.00	2.80		
	Total	cum					5.44	1684.34	9163.00
	Basic Rate	1589.00							
	Area Weightage @ 6%	95.34							
	Total	1684.34							
2	Dismantling of existing structures like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T & P and scaffolding wherever necessary, sorting the dismantled material, disposal of unserviceable material and stacking the serviceable material with all lifts complete as per specifications. - rubble stone masonry in cement mortar (PWDSR 2018-19, P.140, I. 18.27)								
	Culverts								
	5th main 1st cross Balaji layout	cum	2	4.00	0.45	0.90	3.24		
	On cross roads of Balaji layout	cum	2	4.80	0.45	0.90	3.88		
	Total	cum					7.12	372.06	2649.00
	Basic Rate	351.00							
	Area Weightage @ 6%	21.06							
	Total	372.06							
3	KSRRB 300-2 : Earth work excavation by manual means in Hard soil involving an average horizontal throw upto 2 meters and an average lift ~~upto 0.5m~~ ordinary soil, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications complete as per specifications MORTH chapter 3 (Page No. 143, Item No. 19.2, PWDSR 2018-19)								
	CC drain	Cum			av.		0.00		
	5th main, 1st cross road	Cum	2	72.00	1.10	1.05	166.32		
	6th main, from 6th crs to 11th cross	Cum	1	158.00	0.90	1.20	170.64		
	culverts								
	5th main 1st cross Balaji layout	Cum	1	4.00	1.80	1.00	7.20		
	On cross roads of Balaji layout	Cum	1	4.80	1.80	1.00	8.64		
	CC parapet wall	Cum					0.00		
	cc road adjacent mosque	Cum	1	8.00	0.35	0.10	0.28		
	Total						353.08	189.74	66993.00
	Basic Rate	179.00							
	Area Weightage @ 6%	10.74							
	Total	189.74							

130
7.80
137.81

157.81

Sl. No	Description	Unit	No.	L	B	D	Qty	Rate	Amount
4	KSRB 4-1.3 : Providing and laying in position plain cement concrete of mix M7.5 with OPC cement @ 180 Kgs using 40mm and down size graded granite metal, corse aggregates @ 0.85 cum and fine aggregtes @ 0.58cum machine mixed, concrete laid in layers not exceeding 15 cms thick, well compacted, in foundation and plinth, including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2 (Page No. 13, Item No. 4.3, PWDSR 2018-19)								
	CC drain								
	5th main, 1st cross road	Cum	2	72.00	1.10	0.15	23.76		
	6th main, from 6th crs to 11th cross	Cum	1	158.00	0.90	0.15	21.33		
	culverts	Cum					0.00		
	5th main 1st cross Balaji layout	Cum	1	4.00	1.80	0.15	1.08		
	On cross roads of Balaji layout	Cum	1	4.80	1.80	0.15	1.29		
	CC parapet wall	Cum	0	0.00	0.00	0.15	0.00		
	cc road adjacent mosque	Cum	1	8.00	0.35	0.15	0.42		
		Cum					47.88	5408.12	258941.00
	Basic Rate	5102.00							
	Area Weightage @ 6%	306.12							
	Total	5408.12							
5	Providing and constructing granite / trap / basalt size stone masonry in foundation cement mortar 1: 6, stone hammerd dressed in courses not less than 20 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specifications. - **Available stones** (PWDSR 2018-19, P.No.255, I No.34.8.2)								
	For SSM drain	Cum	40% of qty vide item No. 4				2.84		
		Cum					2.84	3287.73	9337.00
	Basic Rate	4596.00							
	Less size stone recurred (105 nos/cum) 105*11.86/- (P.No. III, sl no. 63)	1245.30							
	Deduct 10% overhead chargers	124.53							
	Deduct 10% contractors profit	124.53							
	Sub Total	3101.64							
	Area Weightage @ 6%	186.09							
	Total	3287.73							
6	Providing and constructing granite / trap / basalt size stone masonry in foundation cement mortar 1: 6, stone hammerd dressed in courses not less than 20 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specifications. - **New stones** (PWDSR 2018-19, P.No.255, I No.34.8.2)								
	5th main 1st cross Balaji layout	Cum	2	4.00	0.45	0.90	3.24		
	On cross roads of Balaji layout	Cum	2	4.80	0.45	0.90	3.88		
	Total	Cum					7.12		
	Deduct qty vide item No. 9	Cum					-2.84		
		Cum					4.28	4871.76	20851.00
	Basic Rate	4596.00							
	Area Weightage @ 6%	275.76							
	Total	4871.76							
7	Providing ruled pointing to coursed stone masonry with cement mortar 1:3, 20mm deep, after raking joints to depth of 20mm nicely lining, including cost of materials, labour, curing complete as per specifications with all leads and lifts etc., complete as per the direction of Engineer-in-charge of the work. (PWDSR 2018-19, P No.256, I No.34.13.2)								
	5th main 1st cross Balaji layout	Sqm	2	4.00		0.90	7.20		
	On cross roads of Balaji layout	Sqm	2	4.80		0.90	8.64		
		Sqm					15.84	150.52	2384.00
	Basic Rate	142.00							

Sl. No	Description	Unit	No.	L	B	D	Qty	Rate	Amount
	Area Weightage @ 6%	8.52							
	Total	150.52							
8	Providing and laying in position plain cement concrete of mix 1:2:4 with cement at 240 kg, with 20mm and down size graded granite metal coarse aggregate at 0.69 cum and fine aggregates at 0.459 cum, machine mixed, concrete laid in layers not exceeding 15 cms thick, well compacted for coping including cost of all materials, labour, HOM of machinery, curing, complete as per specifications with all leads and lifts etc., complete as per the direction of Engineer-in-charge of the work. (PWDSR 2018-19, P.No.255, I.No.34.11)								
	culvert-coping								
	5th main 1st cross Balaji layout	Cum	2	4.00	0.45	0.10	0.36		
	On cross roads of Balaji layout	Cum	2	4.80	0.45	0.10	0.43		
	culvert-vent						0.00		
	5th main 1st cross Balaji layout	Cum	1	4.00	0.60	0.10	0.24		
	On cross roads of Balaji layout	Cum	1	4.80	0.60	0.10	0.28		
	culvert-ramps						0.00		
	5th main 1st cross Balaji layout	Cum	2	4.00	0.20	0.15	0.24		
	On cross roads of Balaji layout	Cum	2	4.80	0.20	0.15	0.28		
		Cum					1.83	5599.98	10248.00
	Basic Rate	5283.00							
	Area Weightage @ 6%	316.98							
	Total	5599.98							
9	KSRB 4-6.4: Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for vertical surface such as walls at any thickness, including attached pilasters, buttresses, plinth and string courses cost of all materials, labour complete as per specifications. Specification No. KBS 4.6.2 (Page No.15, Item No. 4.31, PWD SR 2018-19)								
	RCC drain	Sqm							
	5th main, 1st cross road	Sqm	8	72.00		0.75	432.00		
	6th main, from 6th crs to 11th cross	Sqm	4	158.00		0.90	568.80		
		Sqm					1000.80	379.48	379784.00
	Basic Rate	358.00							
	Area Weightage @ 6%	21.48							
	Total	379.48							
10	Providing and laying cement concrete using 20mm and down size granite jelly of ready mixed concrete (RMC)for R.C.C works laid in 15cms thick layers and well compacted vibrating, curing, finishing with necessary cement mortar, form works and scaffoldings to withstand pumping of concrete, with all lead and lifts etc., complete (exclusive of cost of steel and fabrication charges.) Ready mixed Cement concrete M-20 (1:1.5:3) for raft foundation, column footing, main and secondary beams. (Page No. 18, Item No. 4.49.1, PWD SR 2018-19)								
	bottom portion	Cum							
	5th main, 1st cross road	Cum	2	72.00	0.90	0.15	19.44		
	6th main, from 6th crs to 11th cross	Cum	1	158.00	0.90	0.15	21.33		
	side walls	Cum					0.00		
	5th main, 1st cross road	Cum	4	72.00	0.15	0.75	32.40		
	6th main, from 6th crs to 11th cross	Cum	2	158.00	0.15	0.90	42.66		
		Cum					115.83	5770.64	668413.00
	Basic Rate	5444.00							
	Area Weightage @ 6%	326.64							
	Total	5770.64							

Sl. No	Description	Unit	No.	L	B	D	Qty	Rate	Amount
11	KSRB 4.9.2: Providing TMT steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost pf materials, labour, HOM of machinery complete as per specifications. Specification No. KBS 4.6.3 (Page No. 19, Item No. 4.46.2, PWD SR 2018-19)								
	for concrete drain								
	along the drain, 10mm dia bar								
2	5th main, 1st cross road	kg	13	71.80	@	0.62	1157.41		
1	6th main, from 6th crs to 11th cross	kg	15	157.80	@	0.62	1467.54		
	across the drain, 10mm dia bar								
2	5th main, 1st cross road	kg	479	2.10	@	0.62	1247.31		
1	6th main, from 6th crs to 11th cross	kg	1052	2.40	@	0.62	1565.37		
1	steel at 100 kg per cum of cc slab	kg	1	13.65	@	100.00	1365.00		
							6802.63		
		Tonne					6.802	75255.76	511890.0
	Basic Rate	70996.00							
	Area Weightage @ 6%	4259.76							
	Total	75255.76							
12	Providing and laying in position reinforced cement concrete M20 mix with stone aggregates 20mm and downsize for slab (including steel reinforcement) including centering and shuttering, maching mixed, concrete laid in layers not exceeding 15cm thick well compacted cost of all materials, labour, HOM of machineries, curing complete as per specifications. - 200 mm thick (Approved data rate enclosed)								
	5th main 1st cross Balaji layout	Sqm	1	4.00	1.50		6.00		
	On cross roads of Balaji layout	Sqm	1	4.80	1.50		7.20		
		Sqm					13.20	4402.79	58117.00
13	Providing and laying in position reinforced cement concrete M20 mix with stone aggregates 20mm and downsize for slab (including steel reinforcement) including centering and shuttering, maching mixed, concrete laid in layers not exceeding 15cm thick well compacted cost of all materials, labour, HOM of machineries, curing complete as per specifications. - 100 mm thick (Approved data rate enclosed)								
	5th main, 1st cross road	Sqm	2	72.00	0.90		129.60		
	6th main, from 6th crs to 11th cross	Sqm	1	158.00	0.90		142.20		
							271.80	2100.0	570780.00
14	KSRB- 4-1.5 : Providing and laying in position plain cement concrete of mix M20 with OPC cement @ 300 kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.64 cum and fine aggregares @ 0.43 cum with superplastisiser @ 3lts confirming to IS9103-1999 reaffirmed-2008, machine mixed, concrete laid in layers not exceeding 15cms, thick, well compacted, in foundation, plinth and cills, including cost of all materials, labour, HOM of machinery, curing complete as per specifications, specification. No. KBS 4.1,4.2, No. 13/ Item No. 4.5/ PWD SR 2018-19								
	CC Road								
	cc road adjacent mosque	Cum	1	7.00	6.50	0.30	13.65		
		Cum					13.65	5647.68	77091.00
	Basic Rate	5328.00							
	Area Weightage @ 6%	319.68							
	Total	5647.68							
15	Vaccum De-watering with vaccum pump and suction mat and compaction with skin floater clubbed with floating disc including cost of generator HOM of machinery Screed Vibratiry, Power Floater, blade and disc etc., with all lead and lift No. 176 / Item No. 22.7/ PWD SR 2018-19								
	cc road adjacent mosque	Sqm	1	7.00	6.50		45.50		
		Sqm					45.50	72.08	3280.00

Sl. No	Description	Unit	No.	L	B	D	Qty	Rate	Amount
	Basic Rate	68.00							
	Area Weightage @ 6%	4.08							
	Total	72.08							
16	Providing groove cutting for width of 5mm to 10mm and depth 80mm -100mm including cost of cutting machine , generater &HOM of machinery ,including cost of blade , coolant etc ., including cleaning of groove &providing sand and hot bitumen fillars and filler metal etc., including cost of conveyance of all materials , labour lead and lift charges and all other incident charges as per drawing (P.178, I. 22.8.1, SR 2018-19)								
	cc road adjacent mosque	Rm	1	6.50			6.50		
							6.50	143.10	930.00
	Basic Rate Rs	135.00							
	Area Weightage @ 6%	8.10							
	Total	143.10							
17	Lead for Disposal of Debris shall be payable at carriage rates by Mechanical means inlcuding loading and unloading. From 0.00 to 2.00 Km (Page No.123)								
	Qty vide item No. 3*0.85 and 12*0.075	Cum					305.56	87.56	26753.00
	Basic rate for haulage of materials as per item no.17.4 page 136) Rs. 2.00								
	Average weight of earth 1.28 tonne / kg for 2.00X1.28X10.00	25.60							
	Add loading and unloading Vide item no.17.1 P.no.134	57.00							
		82.60							
	Area Weightage @ 6%	4.96							
	Total	87.56							
18	Sub Total-1								**2677604.0**
19	Add GST charges at 12%						**12.00**		321312.00
20	Miscellaneous & Rounding off							L/S	1084.00
	Total Rs								**3000000.00**

CERTIFICATE:

1 The work spot has been inspected and the work is found necessary.
2 This estimate is prepared as per P.W.D S.R of 2018-19
3 The provisions were made in this estimate are necessary and adequate.
4 This works come under B.B.M.P. limits.
5 This work has not been taken previously under any other grant.

Assistant Engineer
Ward no. 08
Kodigehalli

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP

Executive Engineer
Byatrayanapura Division
BBMP
25/07

Administrative Approval

Accorded For Rs.30.00 lakhs
Head of A/C P-1771
CER NO :85 Dt:25/07/2019

TA CE (YNK)

Technical Sanction
Accorded For Rs.30.00 lakhs
Head of A/C P-1771
CER NO :60 Dt.25/07/2019

TA CE (YNK)